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10/044,774	01/11/2002	Vincent L. Weber	2578	8303

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A. Burgess Lowe
101 East Maple Street
North Canton, OH 44720

EXAMINER

SNIDER, THERESA T

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,774

Applicant(s)

WEBER ET AL.

Examiner

Theresa T. Snider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 36-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2-3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-35, drawn to a suction nozzle, classified in class 15, subclass 383.
 - II. Claims 36-44, drawn to an agitator assembly, classified in class 15, subclass 384.
 - III. Claim 45, drawn to an agitator assembly, classified in class 15, subclass 384.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it does not require dual agitators with projections. The subcombination has separate utility such as use in a sweeper.
3. Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it does not require four agitators. The subcombination has separate utility such as in a sweeper.

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4. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes or operation. Invention I is directed to an agitator assembly having two agitators with projections and Invention II is directed to an agitator assembly having four agitators.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Michael J. Corrigan on 10/20/2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-35. Affirmation of this election must be made by applicant in replying to this Office action. Claims 36-45 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

8. The drawings are objected to because in figure 7, '22' lacks a lead arrow. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 412,413(figure 9) and 512,513(figure 10). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

10. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 13(not is figure 1, as disclosed, page 3, line 16) and 320(page 9, line 2). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

11. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because:

reference character "27" has been used to designate both side discharge duct(page 4, line 4), rear discharge duct(page 4, line 14) and suction connection(page 7, line 21);

reference character "54" has been used to designate both transition section(page 5, line 19) and opposite end(page 6, line 10).

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

12. The disclosure is objected to because of the following informalities:

Exemplary of such:

Page 3, line 19, 'an' should be replaced with 'the'.

Page 4, line 7, 'a' should be replaced with 'the';

Line 14, 'addition.' should be replaced with 'addition,';

Line 19, 'a' should be deleted.

Page 5, line 8, 'an' should be deleted.

Page 6, line 18, it is unclear as to what is meant by 'terminates adjacent opening'; a word seems to be missing.

Page 7, line 8, it is unclear as to what is meant by 'because of is formed';

Line 13, 'an' should be deleted;

Line 24, it is unclear as to what is meant by 'outwardly 20 direction'; 20 appears to be in the wrong location.

Page 8, line 20, 'a' should be deleted.

Page 9, line 14, it is believed '236' be replaced with '336'?

Appropriate correction is required.

Claim Objections

13. Claims 1-18 and 26-35 are objected to because of the following informalities:

Claims 1, 5, 15, and 26, line 2, 'duct;;' should be replaced with 'duct;'.
Claim 32, line 1, 'sidewadly' should be replaced with 'sidewardly'.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 1-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, line 3-5, it is unclear as to the orientation of the agitator and the cylindrical section.

Claim 5, line 6, 'cylindrical' should be deleted;

Lines 17-19, it is unclear as to the orientation of the agitator and the cylindrical section.

Claim 10, line 1, it is unclear as to whether the 'a sidewardly extending duct' is in addition to that of claim 5, line 3 or one in the same; perhaps it may be more appropriately rewritten to 'wherein the at least one sidewardly extending duct includes...' (or the like).

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Claim 15, lines 3-5, it is unclear as to the orientation of the agitators and the cylindrical section.

Claim 19, line 17, it is unclear as to where the 'at least two rotary agitators' are located with respect to the previously recited elements.

Claim 24, line 1, it is unclear as to whether the 'a sidewardly extending duct' is in addition to that of claim 19, line 3 or one in the same; perhaps it may be more appropriately rewritten to 'wherein the at least one sidewardly extending duct includes...' (or the like).

Claim 26, line 17, it is unclear as to where the 'at least two rotary agitators' are located with respect to the previously recited elements.

Claim 31, line 1, , it is unclear as to whether the 'a sidewardly extending duct' is in addition to that of claim 16, line 3 or one in the same; perhaps it may be more appropriately rewritten to 'wherein the at least one sidewardly extending duct includes...' (or the like).

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tschudy('653/'095).

Tschudy('653/'095) discloses a nozzle body having a rear discharge duct (fig. 1, #18, fig. 3, #46).

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Tschudy('653/'095) discloses at least one rotary agitator(fig. 2, #64).

Tschudy('653/'095) discloses an inner cylindrical section forming an agitator chamber (fig. 4, #28).

Tschudy('653/'095) discloses a sidewardly extending channel formed in the inner cylindrical section (figs. 6-8, #44).

With respect to claim 3, Tschudy('653/'095) discloses the channel having a top wall and two opposing side walls (fig. 7, #44,50,54).

With respect to claim 4, Tschudy('653/'095) discloses the channel having a hemi-spherical shape(fig. 6, #44).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claims 15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tschudy('653/'095) in view of Nordeen.

Tschudy('653/'095) discloses a similar suction nozzle however fails to disclose two agitators.

Tschudy('653/'095) discloses a nozzle body having a rear discharge duct (fig. 1, #18, fig. 3, #46).

Tschudy('653/'095) discloses at least one rotary agitator(fig. 2, #64). Nordeen discloses a suction nozzle with a rear discharge duct, an inner cylindrical section forming an agitator chamber and at least two rotary agitators (fig. 3, col. 4, lines 43-56). It would have been obvious to one of ordinary skill in the art to substitute the single agitator of Tschudy('653/'095) with the two agitators of Nordeen to allow for greatly improved soil pick-up performance.

Tschudy('653/'095) discloses an inner cylindrical section forming an agitator chamber (fig. 4, #28).

Tschudy('653/'095) discloses a sidewardly extending channel formed in the inner cylindrical section (figs. 6-8, #44).

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With respect to claim 17, Tschudy('653/'095) discloses the channel having a top wall and two opposing side walls (fig. 7, #44,50,54).

With respect to claim 18, Tschudy('653/'095) discloses the channel having a hemispherical shape(fig. 6, #44).

22. Claims 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber in view of Nordeen.

Weber discloses a similar suction nozzle however fails to disclose at least two rotary agitators.

Weber discloses all elements as recited in claim 19, except two agitators (claim 1). Nordeen discloses a suction nozzle with a rear discharge duct, an inner cylindrical section forming an agitator chamber and at least two rotary agitators (fig. 3, col. 4, lines 43-56). It would have been obvious to one of ordinary skill in the art to substitute the single agitator of Weber with the two agitators of Nordeen to allow for greatly improved soil pick-up performance.

With respect to claim 20, Weber discloses the duct being disposed along the front side of the body (col. 2, lines 42-43).

With respect to claim 21, Weber discloses the duct at the front including a communication portion to fluidly communicate with the rear discharge duct (claim 3).

With respect to claim 22, Weber discloses the communication portion having a constant cross-sectional area (claim 4).

With respect to claim 23, Weber discloses the duct being disposed along the rear side of the body (claim 5).

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With respect to claim 24, Weber discloses the duct including one duct in the front of the body and another located in the rear (claim 7).

With respect to claim 25, Weber discloses the front and rear ducts communicating with the rear discharge duct (col. 4, lines 31-37).

Allowable Subject Matter

23. Claims 5 and 26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

24. Claims 2, 6-14, 16 and 27-35 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

25. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses a suction nozzle having a nozzle body with rear discharge duct, at least rotary agitator, an inner cylindrical section forming an agitator chamber and a sidewardly extending channel formed in the inner cylindrical section HOWEVER fails to disclose or fairly suggest the channel centered above the at least one agitator. The prior art discloses a suction nozzle having a nozzle body with rear discharge duct, at least rotary agitator, an inner cylindrical section forming an agitator chamber and a sidewardly extending channel formed in the inner cylindrical section HOWEVER fails to disclose or fairly suggest the further inclusion of a sidewardly extending duct disposed to extend transverse along the nozzle body and having a bottom wall forming a nozzle supporting lip and a pair of vertically extending walls.

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Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Song et al. discloses a suction nozzle with a sidewardly extending channel, transverse to the nozzle body. Freiheit discloses a suction nozzle with two agitators and an agitator chamber.

***PLEASE note, in Weber, claims 2 and 5 are identical. Should one be 'disposed along the front', rather than both 'disposed along the rear'? ***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (703) 305-0554. The examiner can normally be reached on Monday-Wednesday-Friday (6:30AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (703) 308-2920. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

TTS

11/3/03

Theresa T. Snider
Primary Examiner
Art Unit 1744